

ABSTRACT

The present invention concerns an electrochemical pattern replication method, ECPR, and a construction of a conductive electrode for production of applications involving micro and nano structures. An etching or plating pattern, which is defined by a conductive electrode, a master electrode, is replicated on an electrically conductive material, a substrate. The master electrode is put in close contact with the substrate and the etching/plating pattern is directly transferred onto the substrate by using a contact etching/plating process. The contact etching/plating process is performed in local etching/plating cells, that are formed in closed or open cavities between the master electrode and the substrate.